

AMENDMENTS TO THE CLAIMS

Please amend claims 1-16, 20, 22, 24, and 25 as listed below. The following listing of claims is provided in accordance with 37 C.F.R. § 1.121.

1. (currently amended) A ~~transceiver unit~~ base station for use with a wireless communications system, the ~~transceiver unit~~ base station comprising:
an antenna configured to receive a wireless transmission from a mobile device; and
a communication interface, coupled to the antenna, and configured to facilitate communication between the ~~transceiver~~ base station and an access network unit over an undedicated public network, wherein the communication between the ~~transceiver~~ base station and the access network unit is independent of a dedicated connection.
2. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 1, wherein the communication interface comprises at least one protocol layer.
3. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer maintains an IP address of the access network unit.
4. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer converts information received from the access network unit over the public network to RF signals to be communicated by the ~~transceiver unit~~ base station over an air interface.
5. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer converts RF signals received by the ~~transceiver unit~~ base station over an air interface to information suitable for transmission over the public network to the access network controller.

6. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer provides security information to the access network unit to facilitate secure communication over the public network.

7. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer negotiates quality of service for communications with the access network unit over the public network.

8. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer encapsulates higher layer protocol information to facilitate protocol requirements of the public network.

9. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 2, wherein the at least one protocol layer comprises at least one technology dependent protocol layer.

10. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 1, wherein the public network comprises the internet.

11. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 1, comprising at least one antenna to facilitate communications between the ~~transceiver unit~~ base station and at least one portable communications device over an air interface.

12. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 11, comprising a structure on which the at least one antenna resides.

13. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 12, wherein the structure comprises a tower.

14. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 12, wherein the structure comprises a building.

15. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 1, comprising a structure for housing the communication interface.

16. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 15, wherein the structure comprises a cabinet.

17. (previously presented) A tangible medium having a software program for use in a wireless communications system, the software program comprising:

at least one routine for facilitating communication of information over an undedicated public network between at least one base station, which is adapted to communicate over an air interface with portable communications devices, and a controller, which is adapted to process information communicated with the at least one base station, wherein the controller is located between the base station and a service network.

18. (original) The tangible medium, as set forth in claim 17, wherein the at least one routine facilitates communication information over the internet.

19. (original) The tangible medium, as set forth in claim 17, wherein the at least one routine comprises at least one protocol layer adapted to facilitate communication over the public network.

20. (currently amended) A method of producing an information packet in a wireless communications system, the method comprising the acts of:

receiving information at a base station from a transceiver unit via an air interface;
processing the information at the base station to form an information packet suitable for
transmission to an access network unit via an undedicated public network; and
transmitting the information packet from the base station to the access network unit
independent of a dedicated connection.

21. (original) The method, as set forth in claim 20, wherein the public network
comprises the internet.

22. (currently amended) The ~~transceiver unit~~ base station, as set forth in claim 1,
wherein the transceiver is assigned an IP address to facilitate communications with the access
network unit over the undedicated public network.

23. (canceled)

24. (currently amended) The method, as set forth in claim 20, wherein transmitting
the information packet from the base station to the access network unit comprises transmitting
the information packet to a base station controller.

25. (currently amended) The method, as set forth in claim 20, wherein transmitting
the information packet from the base station comprises transmitting the information packet using
one or more Tu-TxrS protocol layers.